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Active Projects

Following is a list of the principal investigators, or institutions, of projects under way or activated in the period since the previous Report, together with the respective project titles. Completed projects are listed in a later section.

PRINCIPAL INVESTIGATOR OR INSTITUTION	PROJECT TITLE
LEO G. ABOOD, PH.D., <i>Professor of Brain Research and Biochemistry, Center for Brain Research, University of Rochester Medical Center, Rochester, NY</i>	Nicotine transfer-disposition in liver cells
KENNETH B. ADLER, PH.D., <i>Assistant Professor of Pathology, University of Vermont College of Medicine, Burlington</i>	Airway mucin secretion: effects of products from bacteria associated with chronic bronchitis
JOHN J. ALBERS, PH.D., <i>Research Associate Professor of Medicine, University of Washington School of Medicine, Seattle</i>	High density lipoprotein quantitation
HARRY N. ANTONIADES, PH.D., <i>Professor of Biochemistry, Harvard University School of Public Health, Boston</i>	Biosynthesis and processing of PDGF-like polypeptides in human malignant cells in culture
THOMAS M. AUNE, PH.D., <i>Adjunct in Immunology, The Jewish Hospital of St. Louis</i>	Interferon—activation of suppressor T cell pathways
BERNARD M. BABIOR, M.D., PH.D., <i>Professor of Medicine, New England Medical Center Hospital, Boston</i>	Studies on the mechanism of activation of the respiratory burst in neutrophils
LESLIE BAER, M.D., <i>Associate Professor of Medicine, Columbia University College of Physicians & Surgeons, New York</i>	Cigarette smoking in normotensive and hypertensive subjects: blood pressure, renin, aldosterone and catecholamine responses
SAMUEL BALK, M.D., PH.D., <i>Pathologist, New England Deaconess Hospital, Boston</i>	Serum mitogens, hormones, ions, viral transforming genes and tumor reversal in appropriate and autonomous initiation of cell replication
DEAN BEFUS, PH.D., <i>Associate Professor of Pathology, McMaster University, Hamilton, Ontario, Canada</i>	The mast cell in interstitial pulmonary fibrosis
JOEL S. BENNETT, M.D., <i>Associate Professor of Medicine, Hospital of the University of Pennsylvania, Philadelphia</i>	Characterization of the platelet fibrinogen receptor
RICHARD J. BING, M.D., <i>Professor of Medicine (emeritus), University of Southern California School of Medicine, Los Angeles; Visiting Associate, California Institute of Technology; Director of Experimental Cardiology and Scientific Development, Huntington Medical Research Institutes, Pasadena, CA</i>	Lipoproteins and the arterial wall
IRA B. BLACK, M.D., <i>Professor and Chief, Division of Developmental Neurology, Cornell University Medical College, New York</i>	Nicotine and neuronal development
PHYLLIS B. BLAIR, PH.D., <i>Professor of Immunology, University of California, Berkeley</i>	Regulation of natural killer cell activity

**PRINCIPAL INVESTIGATOR
OR INSTITUTION**

THOMAS R. BROKER, Ph.D., *Associate Professor of Biochemistry, University of Rochester School of Medicine, Rochester, NY.*

VINCENZO BUONASSISI, M.D., *Senior Scientist and Deputy Director, W. Alton Jones Cell Science Center, Inc., Lake Placid, NY.*

DAVID L. BUSBEE, Ph.D., *Professor of Toxicology, Texas A & M University College of Veterinary Medicine, College Station.*

EDWARD J. CAMPBELL, M.D., *Assistant Professor of Medicine, Washington University School of Medicine, St. Louis.*

FRANCIS C. CHAO, M.D., Ph.D., *Senior Investigator, Center for Blood Research, Boston.*

LAN BO CHEN, Ph.D., *Associate Professor of Pathology, Sidney Farber Cancer Institute, Boston.*

YUAN-TSONG CHEN, M.D., Ph.D., *Assistant Professor of Pediatrics, Duke University Medical Center, Durham, NC.*

DOUGLAS BROCK CINES, M.D., *Professor of Medicine, Hospital of the University of Pennsylvania, Philadelphia.*

JAN F. CHLEBOWSKI, Ph.D., *Assistant Professor of Biochemistry, Medical College of Virginia, Richmond.*

CURTIL CIVIN, M.D., *Assistant Professor of Oncology & Pediatrics, The Johns Hopkins Oncology Center, Baltimore.*

BRIAN L. CLEVINGER, Ph.D., *Assistant Professor of Biomedical Science, Washington University School of Dental Medicine, St. Louis.*

CHARLES G. COCHRANE, M.D., *Member, Department of Immunopathology, Scripps Clinic and Research Foundation, La Jolla, CA.*

BERNICE H. COHEN, Ph.D., *Professor and Director, Human Genetics/Genetic Epidemiology Program, The Johns Hopkins University School of Hygiene and Public Health, Baltimore.*

ROBERT W. COLMAN, M.D., *Professor of Medicine, Temple University School of Medicine, Philadelphia.*

PROJECT TITLE

Cellular transformation by papilloma virus recombinants

Heparan sulfate proteoglycans and blood homeostatic mechanisms

Proteoglycans and nonthrombogenic properties of endothelial cells

Polynuclear aromatic hydrocarbon transport by serum lipoproteins

Modulators of inflammatory cell proteolytic activity

Platelet activation and blood hypercoagulability

Studies on human oat cell carcinomas

Recombinant DNA approaches to assess risk for lung cancer

Immune injury of human endothelial cells

Calorimetric investigation of proteinase- α_2 macroglobulin interaction

Biochemistry and function of human granulopoietic antigens

Role of J segment in V segment expression

Mediation systems in inflammatory lung disease

Genetic-epidemiologic characteristics of smokers and nonsmokers

Initiation of plasma coagulation and kinin forming systems in man

**PRINCIPAL INVESTIGATOR
OR INSTITUTION**

EVA BROWN CRAMER, Ph.D., *Professor of Anatomy and Cell, Downstate Medical Center, Brooklyn.*

CARL E. CRUETZ, Ph.D., *Assistant Professor of Pharmacology, University of Virginia School of Medicine, Charlottesville.*

GIDON CZAPSKI, M.Sc., Ph.D., *of Physical Chemistry, The Hebrew University, Jerusalem, Israel.*

IVAN DAMJANOV, M.D., Ph.D., *Professor of Pathology, Hahnemann School of Medicine, Philadelphia.*

ALBERT B. DEISSEROTH, M.I., *Professor of Medicine, Veterans Administration Medical Center, San Francisco.*

PETER H. DUESBERG, Ph.D., *Professor of Molecular Biology, University of California, Berkeley.*

HAROLD F. DVORAK, M.D., *Professor of Pathology, Beth Israel Hospital, Boston.*

V. GENE ERWIN, Ph.D., *Professor of Pharmacology, Dean, University of Colorado School of Pharmacy, Boulder.*

ALVAN R. FEINSTEIN, M.D., *Professor of Medicine & Epidemiology, Yale School of Medicine, New Haven.*

RICHARD FENTON, Ph.D., *Professor of Physiology, University of Massachusetts School of Medicine, Worcester.*

THOMAS H. FINLAY, Ph.D., *Professor of Obstetrics and Gynecology, New York University Medical Center, New York.*

PAUL B. FISHER, Ph.D., *Senior Associate, Department of Medicine, Columbia University College of Physicians & Surgeons, New York.*

JOSEPH A. FONTANA, M.D., *Assistant Professor of Medicine and Pediatrics, West Virginia University School of Medicine, Morgantown.*

JUDITH ANN FOSTER, Ph.D., *Professor and Chairperson, Department of Biology, Syracuse University, Syracuse.*

RICHARD B. FOX, M.D., *Assistant Professor of Pediatrics, Children's Hospital, Boston.*

AARON E. FREEMAN, Ph.D., *Professor, California Biomedical Research Foundation, La Jolla, CA.*

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	PRINCIPAL INVESTIGATOR OR INSTITUTION	PROJECT TITLE
on by papilloma virus re-	EVA BROWN CRAMER, PH.D., <i>Associate Professor of Anatomy and Cell Biology</i> , Downstate Medical Center, Brooklyn, NY.	Studies of inflammation using an <i>in vitro</i> model
oteoglycans and blood anisms	CARL E. CRUETZ, PH.D., <i>Assistant Professor of Pharmacology</i> , University of Virginia School of Medicine, Charlottesville.	Role of protein phosphorylation in nicotine-induced catecholamine release
ionthrombogenic proper-cells	GIDON CZAPSKI, M.Sc., PH.D., <i>Professor of Physical Chemistry</i> , The Hebrew University, Jerusalem, Israel.	On the toxicity of oxygen and superoxide ion: is superoxide toxic?
e hydrocarbon transport eink	IVAN DAMJANOV, M.D., PH.D., <i>Professor of Pathology</i> , Hahnemann University School of Medicine, Philadelphia.	Developmentally pluripotent human lung cancer stem cells
mmatory cell proteolytic	ALBERT B. DEISSEROTH, M.D., PH.D., <i>Professor of Medicine</i> , Veterans Administration Medical Center, San Francisco.	Study of altered alpha globin genes in leukemia and solid tumors.
id blood hypercoagulabil-	PETER H. DUESBERG, PH.D., <i>Professor of Molecular Biology</i> , University of California, Berkeley.	Transforming genes of two acute leukemia viruses.
at cell carcinomas	HAROLD H. DVORAK, M.D., <i>Chief, Department of Pathology</i> , Beth Israel Hospital, Boston.	Pathogenesis of tumor desmoplasia
approaches to assess risk:	V. GENE ERWIN, PH.D., <i>Professor of Pharmacology</i> , <i>Dean</i> , University of Colorado School of Pharmacy, Boulder.	"Effects of nicotine on neuropeptide secretion by intact mouse brain, a pharmacogenetic study
uman endothelial cells	ALVAN R. FEINSTEIN, M.D., <i>Professor of Medicine & Epidemiology</i> , Yale University School of Medicine, New Haven, CT.	Smoking, detection bias and primary lung cancer
igation of proteinase- α teraction	RICHARD FENTON, PH.D., <i>Instructor in Physiology</i> , University of Massachusetts School of Medicine, Worcester.	Physiological effects of nicotine on calcium and adenosine metabolism by the heart
inction of human granulo-	THOMAS H. FINLAY, PH.D., <i>Associate Professor of Obstetrics and Gynecology</i> , New York University Medical Center, New York.	Structure, properties and regulation of mouse plasma protease inhibitors
n V segment expression	PAUL B. FISHER, PH.D., <i>Senior Research Associate</i> , <i>Department of Microbiology</i> , Columbia University College of Physicians & Surgeons, New York.	Chemical-viral interactions in cell transformation
in inflammatory lung dis-	JOSEPH A. FONTANA, M.D., PH.D., <i>Assistant Professor of Medicine and Biochemistry</i> , West Virginia University Medical Center, Morgantown.	Glycosyltransferases and glycoprotein synthesis in differentiation induced phenotypic reversal of malignancy by retinoic acid cyclic nucleotides and other agents
stologic characteristics of smokers	JUDITH ANN FOSTER, PH.D., <i>Professor and Chairperson</i> , <i>Department of Biology</i> , Syracuse University, Syracuse, NY.	Involvement of elastin in lung disease
ia coagulation and kinin in man	RICHARD B. FOX, M.D., <i>Assistant Professor of Pediatrics</i> , Children's Hospital Corporation, Boston.	Role of glycosaminoglycans in lung edema
	AARON E. FREEMAN, PH.D., <i>Staff Scientist</i> , California Biomedical Research Foundation, La Jolla, CA.	Rodent and human lung epithelial cell culture as a tool for carcinogenesis research <i>in vitro</i>

**PRINCIPAL INVESTIGATOR
OR INSTITUTION**

PROJECT TITLE

ERROL C. FRIEDBERG, M.D., <i>Associate Professor of Pathology, Stanford University, Stanford, CA.</i>	Complementing human cells with cloned yeast DNA repair genes
KJELL FUXE, M.D., <i>Professor of Histology, The Karolinska Institute, Stockholm.</i>	Nicotine, catecholamines and neuroendocrine functions
JAMES W. GAUBATZ, Ph.D., <i>Assistant Professor of Biochemistry, University of South Alabama, Mobile.</i>	Direct demonstration of high affinity drug-DNA interactions by restriction enzyme mapping
J. BERNARD L. GEE, M.D., <i>Professor of Medicine, Yale University School of Medicine, New Haven, CT.</i>	Tissue matrix and phagocyte injury: relative contributions of proteases and oxidants
JACQUES E. GIELEN, Ph.D., <i>Associate Professor, Laboratory of Medical Chemistry, Toxicology and Hygiene, Institute of Pathology, University of Liège, Liège, Belgium.</i>	Towards a molecular understanding of mono-oxygenase regulatory mechanisms in animals and man
GORDON NELSON GILL, M.D., <i>Professor of Medicine, University of California, San Diego, La Jolla.</i>	Epidermal growth factor receptor gene in epidermoid carcinoma
GABRIEL C. GODMAN, M.D., <i>Professor of Pathology, Columbia University College of Physicians & Surgeons, New York.</i>	Cytoskeletal organization of the endothelial cell in regulation of shape contractility and surface movement
WARREN M. GOLD, M.D., <i>Professor of Medicine, Cardiovascular Research Institute, University of California, San Francisco.</i>	Effect of ozone on airway mast cells
SIDNEY GOLDFISCHER, M.D., <i>Professor of Pathology, Albert Einstein College of Medicine, The Bronx, NY.</i>	Extracellular matrix-cytochemistry and ultrastructure
MAURICE GREEN, M.D., <i>Director, Institute for Molecular Virology, St. Louis University Medical Center, St. Louis.</i>	Amplification of human adenovirus transformation proteins in prokaryotic and eukaryotic cells
CHARLES S. GREENBERG, M.D., <i>Assistant Professor of Medicine, Duke University Medical Center, Durham, NC.</i>	Transglutaminases and atherosclerosis
MARK I. GREENE, Ph.D., <i>Associate Professor of Pathology, Harvard Medical School, Boston.</i>	Suppressor cells in syngeneic tumor immunity
NOBUYOSHI HAGINO, M.D., Ph.D., <i>Professor of Anatomy, University of Texas Health Science Center, San Antonio.</i>	Nicotinic receptors of LHRH axon terminals in the median eminence
CAROLINE B. HALL, M.D., <i>Associate Professor of Pediatrics and Medicine, University of Rochester School of Medicine, Rochester, NY.</i>	Interrelationship of infectious lower respiratory tract disease in infancy, and host and environmental factors to later development of chronic lung disease
LINDA M. HALL, Ph.D., <i>Associate Professor of Genetics and Neuroscience, Albert Einstein College of Medicine of Yeshiva University, The Bronx, NY.</i>	Genetic differences in nicotine sensitivity in <i>Drosophila melanogaster</i> strains

**PRINCIPAL INVESTIGATOR
OR INSTITUTION**

PAUL HAMOSH, M.D., <i>Associate Professor of Physiology and Biophysics, Georgetown University School of Medicine and Dentistry, Washington, D.C.</i>
RONALD G. HARVEY, Ph.D., <i>Organic Chemistry, The University of Chicago.</i>
ROBERT M. HOFFMAN, Ph.D., <i>Professor of Pediatrics in Residence, University of California School of Medicine, La Jolla.</i>
WAYNE HOSS, Ph.D., <i>Associate Professor of Brain Research, Rochester Medical Center, Rochester, NY.</i>
HAROLD P. JONES, Ph.D., <i>Professor of Biochemistry, University of Alabama, Mobile.</i>
MORRIS J. KARNOVSKY, M.D., <i>Shattuck Professor of Pathology, Harvard Medical School, Boston.</i>
SIMON KARPATKIN, M.D., <i>Professor of Medicine, New York University School of Medicine, New York.</i>
SHIRLEY L. KAUFFMAN, M.D., <i>Professor of Pathology, State University of New York at Stony Brook.</i>
INGEGGERD M. KEITH, Ph.D., <i>Professor of Anatomy, University of Wisconsin School of Veterinary Medicine, Madison.</i>
HEINZ KOHLER, M.D., Ph.D., <i>Professor of Molecular Biology, Roswell Park Memorial Institute, Buffalo, NY.</i>
MARKKU KOSKENVUO, M.D., <i>and Chairman, Department of Health Science, University of Helsinki, Finland.</i>
ROBERT W. KREILICK, Ph.D., <i>Professor of Chemistry, University of Rochester, NY.</i>
KLAUS E. KUETTNER, Ph.D., <i>and Chairman, Department of Pathology, Rush College of Health, Rush Medical College, Rush, St. Luke's Medical Center, St. Louis.</i>
ABEL LAJTHA, Ph.D., <i>Director, State Research Institute for Drug and Alcohol Addiction, New York.</i>
DON LAPENAS, M.D., <i>Associate Professor of Pathology, University of Vermont College of Medicine, Burlington.</i>
E. CLINTON LAWRENCE, M.D., <i>Professor of Medicine, Baylor College of Medicine, Houston.</i>

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PRINCIPAL INVESTIGATOR OR INSTITUTION

PAUL HAMOSH, M.D., *Associate Professor of Physiology and Biophysics, and Medicine, Georgetown University Schools of Medicine and Dentistry, Washington, D.C.*

RONALD G. HARVEY, PH.D., *Professor of Organic Chemistry, The University of Chicago.*

ROBERT M. HOFFMAN, PH.D., *Assistant Professor of Pediatrics in Residence, University of California School of Medicine, La Jolla.*

WAYNE HOSS, PH.D., *Associate Professor, Center for Brain Research, University of Rochester Medical Center, Rochester, NY.*

HAROLD P. JONES, PH.D., *Assistant Professor of Biochemistry, University of South Alabama, Mobile.*

MORRIS J. KARNOVSKY, M.B., B. CH., *Shattuck Professor of Pathological Anatomy, Harvard Medical School, Boston.*

SIMON KARPATKIN, M.D., *Professor of Medicine, New York University Medical Center, New York.*

SHIRLEY L. KAUFFMAN, M.D., *Professor of Pathology, State University of New York Downstate Medical Center, Brooklyn.*

INGEGERD M. KEITH, PH.D., *Assistant Professor of Anatomy, University of Wisconsin School of Veterinary Medicine, Madison.*

HEINZ KOHLER, M.D., PH.D., *Director, Department of Molecular Immunology, Roswell Park Memorial Institute, Buffalo, NY.*

MARKKU KOSKENVUO, M.D., *Professor and Chairman, Department of Public Health Science, University of Helsinki, Helsinki, Finland.*

ROBERT W. KREILICK, PH.D., *Professor of Chemistry, University of Rochester, Rochester, NY.*

KLAUS E. KUETTNER, PH.D., *Professor and Chairman, Department of Biochemistry, Rush College of Health Sciences and Rush Medical College, Rush-Presbyterian-St. Luke's Medical Center, Chicago.*

ABEL LAJTHA, PH.D., *Director, New York State Research Institute for Neurochemistry and Drug Addiction, New York.*

DON LAPENAS, M.D., *Assistant Professor of Pathology, University of Vermont College of Medicine, Burlington.*

E. CLINTON LAWRENCE, M.D., *Assistant Professor of Medicine, Baylor College of Medicine, Houston.*

PROJECT TITLE

Cigarette smoke and lipoprotein remodeling by the lung

Novell anticarcinogenic coumarins and flavones

Methionine dependence, methylation and organic transformation

Regulation of cellular oncogenes

Studies of nicotine interaction with blood cells

Calcium-dependent regulatory proteins and neutrophil activation

The molecular basis of pulmonary surfactant secretion by type II pneumocytes: studies in intact cells and a cell-free system

The role of platelets in tumor cell metastases

Oncogenes in chemical carcinogenesis

Part I: Lung neuroendocrine cell innervation

Part II: Transplacental effect of smoking on lung neuroendocrine cells in the neonate

Multi-targeting with hybridomas on tumor cells

The Finnish Twin Cohort Follow-up Study

Investigations of the interaction of nicotine with membranes

Regulation of proliferation of invasive cells

Genetic basis for nicotine response

The association of inorganic dust deposition with pulmonary neoplasia in tobacco users

Effects of cigarette smoking on immunoglobulin production by human bronchial lymphocytes

**PRINCIPAL INVESTIGATOR
OR INSTITUTION**

PROJECT TITLE

JOSEPH D. LOCKER, M.D., Ph.D., *Assistant Professor of Pathology and Biochemistry*, University of Pittsburgh School of Medicine.

DNA methylation in neoplasia

GESINA L. LONGNECKER, Ph.D., *Associate Professor of Pharmacology*, University of South Alabama College of Medicine, Mobile.

Studies of platelet and endothelial prostanoid production as possible cardiovascular risk indicators in smokers

RONALD B. LUFTIG, Ph.D., *Professor and Head, Department of Microbiology and Immunology*, LSU Medical Center, New Orleans.

Interactions between RNA viruses and chemical carcinogens

JAN M. LUNDBERG, M.D., *Assistant Professor of Pharmacology*, Karolinska Institutet, Stockholm, Sweden.

Sensory neuropeptides and smoke-induced irritation in the respiratory tract

HENRY T. LYNCH, M.D., *Professor and Chairman, Department of Preventive Medicine and Public Health*, Creighton University School of Medicine, Omaha.

Genetic and biomarker studies of cancers of the respiratory tract, pancreas and urinary bladder

BRUCE A. MACHER, Ph.D., *Assistant Professor of Pharmaceutical Chemistry*, University of California, San Francisco.

Chemistry and biology of complex carbohydrates

HOWARD S. MAKER, M.D., *Associate Professor of Neurology*, Mount Sinai School of Medicine, New York.

Nicotine action on brain neurotransmitters and in an animal model of Parkinson's disease

RICHARD A. MARKHAM, M.D., *Assistant Professor of Medicine and of Microbiology and Immunology*, The Jewish Hospital of St. Louis.

T cell-mediated immunity to *Pseudomonas aeruginosa*

ALAN C. McLAUGHLIN, Ph.D., *Lecturer in Biochemistry/Biophysics*, University of Pennsylvania School of Medicine, Philadelphia.

Interaction of divalent cations with model and biological membranes

STELLA MITRANI-ROSENBAUM, Ph.D., *Professor of Virology*, Hebrew University-Hadassah Medical School, Jerusalem, Israel.

Molecular analysis of human genital papilloma virus

FERID MURAD, M.D., Ph.D., *Professor of Medicine and Pharmacology*, Stanford University, and *Chief of Medicine*, Palo Alto V.A. Hospital, Stanford, CA.

Mechanism of nitric oxide activation of guanylate cyclase

Role of cyclic GMP in smooth muscle relaxation

CHRISTOPHER MURLAS, M.D., *Assistant Professor of Medicine*, University of Cincinnati.

Electromechanical properties of airway muscle

JAY A. NADEL, M.D., *Professor of Medicine, Physiology and Radiology*, Cardiovascular Research Institute, University of California, San Francisco.

Mechanisms of airway hyperreactivity

SUSAN L. NAYLOR, Ph.D., *Associate Professor of Human Genetics*, The University of Texas Health Science Center, San Antonio.

Molecular and genetic analysis of small cell lung cancer

DONALD J. NELSON, Ph.D., *Associate Professor of Chemistry*, Clark University, Worcester, MA.

Calmodulin interactions with target proteins and synaptic vesicles

**PRINCIPAL INVESTIGATOR
OR INSTITUTION**

STEFAN NIEWIAROWSKI, *Professor of Physiology*, Research Center, Temple University School of Medicine, Philadelphia.

JANET M. OLIVER, Ph.D., *Pathology*, University School of Medicine, Albany.

F. WILLIAM ORR, M.D., *Professor of Pathology*, University of Winnipeg, Winnipeg, Manitoba, Canada.

YOSHIO OSAWA, Ph.D., *Biochemistry Department*, University of Buffalo, Buffalo, New York.

BENDICHT U. PAULI, D., *Professor of Pathology*, St. Lukes Medical Center, Denver, Colorado.

BORIS M. PETERLIN, M.D., *Professor of Medicine*, Section of Clinical Immunology, California School of Medicine, San Francisco.

DENNIS R. PETERSEN, *Professor of Pharmacology*, Colorado School of Pharmacy, Denver, Colorado.

JULIA M. POLAK, D.Sc., *Lecturer in Histopathology*, Graduate Medical School, St. Thomas Hospital, London.

WILLIAM A. PRYOR, Ph.D., *Professor of Chemistry*, Louisiana State University, Baton Rouge.

MICHAEL S. RABSON, *Scientist, Laboratory of Experimental Cancer*, National Cancer Institute, Bethesda, Maryland.

TIMOTHY J. REGAN, M.D., *Professor of Medicine, Director, Division of Cardiac Diseases*, College of Dentistry of New Jersey, Rutgers University, Newark.

JOHN E. REPINE, M.D., *Webb-Waring Lung Institute Professor of Medicine*, University of Colorado Health Sciences Center, Denver.

ROBERT RESNICK, M.D., *Professor of Reproductive Medicine*, University of California Medical Center, San Diego.

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PRINCIPAL INVESTIGATOR OR INSTITUTION

STEFAN NIEWIAROWSKI, M.D., PH.D.,
*Professor of Physiology, Thrombosis Re-
search Center, Temple University School of
Medicine, Philadelphia.*

JANET M. OLIVER, PH.D., *Professor of
Pathology, University of New Mexico
School of Medicine, Albuquerque.*

F. WILLIAM ORR, M.D., *Associate Profes-
sor of Pathology, University of Manitoba,
Winnipeg, Manitoba, Canada.*

YOSHIO OSAWA, PH.D., *Head, Endocrine
Biochemistry Department, Medical Foun-
dation of Buffalo, Buffalo, NY.*

BENDICHT U. PAULI, D.V.M., *Associate
Professor of Pathology, Rush Presbyterian-
St. Lukes Medical Center, Chicago.*

BORIS M. PETERLIN, M.D., *Assistant Pro-
fessor of Medicine, Section of Rheuma-
tology-Clinical Immunology, University of
California School of Medicine, San Fran-
cisco.*

DENNIS R. PETERSEN, PH.D., *Associate
Professor of Pharmacology, University of
Colorado School of Pharmacy, Boulder.*

JULIA M. POLAK, D.Sc., M.D., *Senior
Lecturer in Histopathology, Royal Post-
graduate Medical School, Hammersmith
Hospital, London.*

WILLIAM A. PRYOR, PH.D., *Boyd Profes-
sor of Chemistry, Louisiana State Univer-
sity, Baton Rouge.*

MICHAEL S. RABSON, PH.D., *Research
Scientist, Laboratory of Pathology, Na-
tional Cancer Institute, Bethesda, MD.*

TIMOTHY J. REGAN, M.D., *Professor of
Medicine, Director, Division of Cardiovas-
cular Diseases, College of Medicine and
Dentistry of New Jersey, New Jersey Medi-
cal School, Newark.*

JOHN E. REPINE, M.D., *Assistant Director,
Webb-Waring Lung Institute, Associate
Professor of Medicine, University of Colo-
rado Health Sciences Center, Denver.*

ROBERT RESNICK, M.D., *Associate Pro-
fessor of Reproductive Medicine, Univer-
sity of California Medical Center, San
Diego.*

PROJECT TITLE

Platelet interaction with fibrinogen and its
significance in hemostasis

Regulation of the membrane oxidase of human
polymorphonuclear leukocytes

Role of local factors in pulmonary metastasis

Aromatase inhibitors in cigarette smoke and
tobacco

Local regulation of tumor invasion by host-
derived proteinase inhibitors

Biology and molecular biology of the differen-
tiation of a human monocytoid cell line

Implementation of the isolated/perfused liver
to study nicotine metabolism and metabolic
interactions

Investigation of the role of regulatory peptides
in human lung disease

Free radical chemistry of cigarette smoke

Analysis of sequences required for bovine pa-
pilloma virus transformation and autono-
mous plasmid replication

Susceptibility of arrhythmias and catechol-
amine metabolism in chronic smoking ani-
mals

Basic mechanisms of lung injury from inhaled
oxidants

The effect of nicotine on uterine and fetal car-
diovascular hemodynamics

**PRINCIPAL INVESTIGATOR
OR INSTITUTION**

PROJECT TITLE

VIRGINIA L. RICHMOND, Ph.D., *Research Associate*, Pacific Northwest Research Foundation, Seattle.

Elastic fiber microfibrillar protein structure

EUGENE ROBERTS, Ph.D., *Research Scientist*, City of Hope Research Institute, Duarte, CA.

Effects of nicotine on the cerebrovasculature *in vitro*

PETER M. ROSS, Ph.D., *Research Associate*, The Rockefeller University, New York.

DNA damage and selective maintenance of animal genes

UNA S. RYAN, Ph.D., *Research Professor of Medicine*, University of Miami School of Medicine, Miami, FL.

Interactions of hormones with cells of the pulmonary vascular wall

BRAHMA P. SANI, Ph.D., *Head, Protein Biochemistry*, Southern Research Institute, Birmingham, AL.

Selenium-binding proteins

REGINA M. SANTELLA, Ph.D., *Associate Professor of Medicine and Environmental Sciences*, Columbia University, New York.

Development of monoclonal antibodies to carcinogen-DNA adducts

B. V. RAMA SASTRY, D.Sc., Ph.D., *Professor of Pharmacology*, Vanderbilt University School of Medicine, Nashville, TN.

Maternal smoking and blood concentrations of amino acids in umbilical arteries and veins

Influence of nicotine on the release of acetylcholine in the human placenta and its implications on the fetal growth

ISHAIAHU SCHECHTER, Ph.D., *Senior Lecturer in Biochemistry*, The George S. Wise Faculty for Life Sciences, Tel Aviv University, Tel Aviv, Israel.

Effect of thiols and disulfides on cholesterol metabolism

CHARLES H. SCOGGIN, M.D., *Head, Division of Clinical Applications, Associate Professor of Medicine*, University of Colorado Health Sciences Center, Denver.

The somatic cell genetics of lung cancer

HENRY SERSHEN, Ph.D., *Research Scientist IV, Neurochemistry Division*, Nathan S. Kline Institute, Ward's Island, New York.

Development of an animal model of Parkinson's disease

ROBERT J. SKLAREW, Ph.D., *Research Associate Professor of Pathology*, New York University Research Service, Goldwater Memorial Hospital, Roosevelt Island, New York.

Cytokinetics of heteroplloid subpopulations by imaging

**PRINCIPAL INVESTIGATOR
OR INSTITUTION**

STEVEN S. SMITH, Ph.D., *Research Scientist*, City of Hope Research Institute, Duarte, CA.

TIMOTHY A. SPRING, Ph.D., *Professor of Pathology of Membrane Immunology*, Farber Cancer Institute, Boston.

ERIC J. STANBRIDGE, Ph.D., *Professor of Microbiology*, University of California, Irvine.

NORMAN C. STAUB, Ph.D., *Physiology, Cardiovascular Medicine*, University of California, San Francisco.

DANIEL STEINBERG, Ph.D., *Professor of Medicine, Hematology*, The University of California at San Diego, La Jolla.

THOMAS P. STOSSEL, Ph.D., *Cal Oncology Unit*, Massachusetts General Hospital, Boston.

FLEUR L. STRAND, Ph.D., *Physiology*, New York University, New York.

D. LANSING TAYLOR, Ph.D., *Biology*, Carnegie Mellon University, Pittsburgh.

JOSEPH CHARLES TAYLOR, Ph.D., *Associate Research Scientist*, City of Hope Research Institute, Duarte, CA.

JOHN A. THOMPSON, Ph.D., *Professor of Pharmacology*, University of Colorado Health Sciences Center, Boulder.

JAMES TRAVIS, Ph.D., *Physiology, Chemistry*, The University of Athens, Athens.

EMIL R. UNANUE, Ph.D., *Professor of Immunology*, Harvard Medical School, Boston.

HAROLD E. VARMUS, Ph.D., *Microbiology and Immunology*, University of California, San Francisco.

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